

ABSTRACT

An apparatus and method to insert a spinal catheter and minimize incidence of post dural puncture headache. The apparatus typically includes a support needle with a non-cutting piercing tip and an exteriorly mounted catheter. The catheter gauge is reduced, while ease of use is increased by the exterior mounting. The catheter may include a kink sleeve that protects against kinking when bent during use. A central stylet may be included to prevent entry of matter into the support needle opening during insertion. Methods using a single stick insertion procedure allow for catheter placement to be determined and adjusted based on physical feedback obtained during the single stick insertion.